

What is claimed is:

1. A power supply having a stable reset function in a mobile electronic unit comprising a digital signal processing unit for processing a video signal or an audio signal input into the mobile electronic unit, the power supply comprising:

a power supply unit, which generates a plurality of source voltages needed in respective elements of the mobile electronic unit using an input power source supplied from an adapter or battery;

a first reset unit, which, when at least one output voltage from the power supply unit is abnormal, generates a first reset signal;

a second reset unit, which, when the input power source from the adapter or battery is less than a predetermined reference voltage, generates a second reset signal; and

a controller which is reset by means of one of the first and second reset signals, and when the second reset signal is applied thereto, controls the power supply unit to cut off the source voltage for the digital signal processing unit.

2. The power supply of claim 1, wherein the predetermined reference voltage is a source voltage for the digital signal processing unit.

3. The power supply of claim 1, wherein the predetermined reference voltage is the lowest positive source voltage among the plurality of the source voltages for the digital signal processing unit.

4. The power supply of claim 1, wherein the second reset unit comprises:

a first transistor wherein power is supplied by the adapter or battery being applied to a base terminal of the first transistor and the source voltage

for the digital signal processing unit being applied to an emitter terminal of the first transistor; and

a second transistor, which is connected to a collector terminal of the first transistor and generates the second reset signal depending on whether the first transistor is turned on.

5           5.       The power supply of claim 1, wherein the mobile electronic unit is a digital camera.

10           6.       The power supply of claim 1, wherein the mobile electronic unit is a personal digital assistant.

              7.       The power supply of claim 1, wherein the mobile electronic unit is a mobile phone.

15           8.       A power supply having a stable reset function in a mobile electronic unit comprising

a digital signal processing unit;

a power supply unit;

20           a first reset unit;

a second reset unit; and

a controller.

              9.       The power supply of claim 8 wherein the digital signal processing unit processes a video signal or an audio signal input in the mobile electronic unit.

              10.      The power supply of claim 8 wherein the power supply unit generates a plurality of source voltages for an element of the mobile electronic unit that uses an input power source supplied from an adapter or a battery.

11. The power supply of claim 8 wherein the first reset unit generates a first reset signal when at least one output voltage from the power supply unit is abnormal.

5 12. The power supply of claim 8 wherein the second reset unit generates a first reset signal when an input power source from an adapter or a battery is less than a predetermined reference voltage.

10 13. The power supply of claim 8 wherein the controller is reset by means of a first and second reset signals.

14. The power supply of claim 8 wherein the controller is reset by a second reset signal and cuts off the source voltage for the digital signal processing unit.

15 15. The power supply of claim 12, wherein the predetermined reference voltage is a source voltage for the digital signal processing unit.

20 16. The power supply of claim 1, wherein the predetermined reference voltage is the lowest positive source voltage among a plurality of the source voltages for the digital signal processing unit.

17. The power supply of claim 8, wherein the second reset unit comprises:

25 (a) a first transistor wherein power is supplied by an adapter or a battery and is applied to a base terminal of the first transistor and a source voltage for the digital signal processing unit is applied to an emitter terminal of the first transistor; and

(b) a second transistor, which is connected to a collector terminal of the first transistor and generates a second reset signal depending on whether the first transistor is turned on.

5           18. The power supply of claim 8, wherein the mobile electronic unit is a digital camera.

          19. The power supply of claim 8, wherein the mobile electronic unit is a personal digital assistant.

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          20. The power supply of claim 8, wherein the mobile electronic unit is a mobile phone.